

REMARKS

The following remarks are presented in response to the Final Office Action of October 5, 2006, and the Advisory Action dated December 21, 2006. (The Advisory Action, in turn, responds to a Request for Reconsideration filed on December 5, 2006.) The Applicant respectfully requests reconsideration and allowance of the present application in view of the amendments presented herein in conjunction with the following remarks.

Request for Continued Examination (RCE)

A Request for Continued Examination (RCE) is being filed on the same date herewith. The RCE ensures entry of this Response.

Regarding the 35 U.S.C. § 102(b) Rejection

Claims 1, 7-9, 13, 27, 30, 31, 33-37, 40, 41, and 43-46 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Published Application No. 2005/0066063 to Grigorovitch et al. (referred to below as "Grigorovitch"). Applicant respectfully traverses this rejection for the following reasons.

Consider independent claim 1, as amended, reproduced in full as follows, with emphasis added:

1. A method for reading information from an optical storage medium, comprising:
providing a cache memory having multiple cache segments;
receiving a request for information stored on the optical storage medium;

determining whether the requested information is stored in one of the cache segments;

retrieving the requested information from said one of the cache segments if the information is determined to be stored in the cache memory; and

retrieving the requested information from the optical storage medium itself if the information is determined not to be stored in the cache memory,

wherein the cache memory includes a first group of at least one cache segment dedicated to handling a first type of information, and a second group of at least one cache segment dedicated to handling a second type of information, and

wherein the first type of information pertains to information that is designated for retrieval in a streaming transfer mode in which parts of the information are retrieved on an as-needed piecemeal basis as the information is consumed, and the second type of information pertains to information that is designated for retrieval in a bulk transfer mode in which a bulk quantity information is retrieved as a whole, not in multiple parts on an on-needed piecemeal basis.

Grigorovitch does not disclose the subject matter of claim 1. For example, Grigorovitch at least does not disclose the bold-highlighted feature of claim 1, in combination with the other features of claim 1 when read as a whole.

The Patent Office identifies a portion of paragraph No. 3 of Grigorovitch as having relevance to the bold-highlighted portion of claim 1 (in its original, unamended, form). Paragraph No. 3 of Grigorovitch states, in full:

[0003] A basic streaming media file typically includes at least two streams: a video stream and an audio stream. More complex streaming media file will include multiple video and/or audio streams, each stream being encoded at a different bit rate (i.e., multi-bit rate encoding). For example, a given portion or stream of video may be stored in a multiple bit rate encoded streaming media file in six different video streams, each stream being encoded at a different bit rate. When a client requests the streaming media file from the server, a determination is then made as to the bandwidth of the link between the server and the client. One of the six video streams and an audio stream are then selected for transmission to the client, based on predetermined bandwidth criteria. For example, the video and audio streams may be selected such that their combined bit rates are less than a predetermined percentage of the available link bandwidth. If, at some point in the streaming process, the link bandwidth between the server and the client increases or decreases, a different combination of audio and video streams is then selected to meet the predetermined bandwidth criteria. This type of 'stream selection' from a multi-bit rate encoded streaming media file based on available bandwidth is commonly referred to as 'intelligent streaming.'

This passage describes intelligent streaming involving "stream selection" from a multi-bit rate encoded streaming media file based on available bandwidth. In contrast, claim 1 recites, in part, that "the cache memory includes a first group of at least one cache segment dedicated to handling a first type of information, and a second group of at least one cache segment dedicated to handling a second type of information," "wherein the first type of information pertains to information that is designated for retrieval in a streaming transfer mode in which parts of the information are retrieved on an as-needed piecemeal basis as the information is consumed, and the second type of information

1 pertains to information that is designated for retrieval in a bulk transfer mode in which a
2 bulk quantity information is retrieved as a whole, not in multiple parts on an on-needed
3 piecemeal basis.” Grigorovitch’s stream selection is different than what is being claimed
4 in this clause, even given the Patent Office’s expansive interpretation provided on page
5 No. 3 of the Advisory Action.

6 For the above-identified reasons, the Applicant submits that the rejection of
7 claim 1 is improper, and respectfully requests that it be withdrawn. Independent
8 claims 14 and 27 recite subject matter that is related to that set forth in claim 1.
9 Therefore, independent claims 14 and 27 are not disclosed by Grigorovitch for
10 similar reasons to those set forth above for claim 1.

11 Independent claim 37 has been amended to clarify the terms “streaming
12 transfer mode” and “bulk transfer mode” in a different manner. Claim 37 is
13 reproduced below, with emphasis:

14
15 37. An apparatus for reading information from a storage medium, comprising:

16 a cache memory having multiple cache segments, wherein the cache memory
17 includes a first group of at least one cache segment dedicated to handling a first type of
18 information designated for retrieval in a streaming transfer mode, and a second group of at
19 least one cache segment dedicated to handling a second type of information designated for
20 retrieval in a bulk transfer mode, wherein a rate of consumption in the streaming transfer
21 mode is slower than a rate at which information is retrieved, and wherein, in the bulk
22 transfer mode, information is consumed as quickly as it is retrieved;

23 cache management logic, including:

24 logic configured to receive a request for information stored on the storage medium;
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1 logic configured to determine whether the requested information is stored in one of
2 the groups of cache segments;

3 logic configured to retrieve the requested information from said one of the groups of
4 cache segments if the information is determined to be stored in the cache memory; and

5 logic configured to retrieve the requested information from the storage medium
6 itself if the information is determined not to be stored in the cache memory.

7
8 Grigorovitch does not disclose the subject matter of claim 37. For example,
9 Grigorovitch at least does not disclose the bold-highlighted feature of claim 37, in
10 combination with the other features of claim 37 when read as a whole.

11 Now consider independent claim 31. This claim recites in full (with
12 emphasis):

13
14 31. A method for reading information from a storage medium, comprising:
15 providing a cache memory;
16 receiving a request for information stored on the storage medium;
17 determining whether the requested information is stored in the cache memory;
18 retrieving the requested information from the cache memory if the information is
19 determined to be stored in the cache memory, including:

20 moving a pointer associated with the cache memory ahead to define free cache
21 space;

22 pre-fetching information from the storage medium; and

23 filling the pre-fetched information in the free cache space of the cache memory; and
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1 retrieving the requested information from the storage medium itself if the
2 information is determined not to be stored in the cache memory.

3
4 Grigorovitch does not disclose the subject matter of claim 31. For example,
5 Grigorovitch at least does not disclose the bold-highlighted feature of claim 31, in
6 combination with the other features of claim 31 when read as a whole.

7 The Patent Office identifies a portion of paragraph No. 49 of Grigorovitch as
8 having relevance to the bold-highlighted portion of claim 31. Paragraph No. 49 of
9 Grigorovitch states, in full:

10
11 [0049] The free pages record 442 includes a number of table record data fields 441,
12 including a number of free pages data field 443, a first external block ID field 445, and a free
13 page record field 447. The number of free pages data field 443 includes an identifier
14 indicating the number of free pages in the cache file. The free page record field 447 includes
15 a table particularly identifying the various free data pages in the cache file. In the case where
16 the number of free data pages exceeds the number of free data pages that can be specified in
17 the free page record field 447, the first external block ID includes a pointer to a page that
18 includes a data structure identifying additional free data pages.

19
20 This passage describes, in part, that a pointer is provided in “the case where the
21 number of free data pages exceeds the number of free data pages that can be specified in
22 the free page record field 447,” where this pointer simply points “to a page that includes a
23 data structure identifying additional free data pages.” In contrast, claim 31 recites, in
24 part, an operation of “**moving a pointer** associated with the cache memory **ahead** to
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1 define free cache space.” The provision of providing a “pointer to a page that includes a
2 data structure” (as disclosed in Grigorovitch) cannot be interpreted as **moving** a pointer
3 **ahead** (as recited, in part, in claim 31).

4 In response to this argument, the Office Action states in paragraph No. 31 that:

5
6 With regards to Claim 31, the Applicant alleges that Grigorovitch does not disclose
7 the bold-highlighted portion of Claim 31, which state ‘moving a pointer associated with the
8 cache memory ahead to define free cache space’. However, the Examiner maintains that
9 Section 0049, lines 8-12 state the following which teaches the limitation of the claim: State
10 the following: ‘In the case where the number of free data pages exceeds the number of free
11 data pages that can be specified in the free page record field 447, the first external block ID
12 includes a pointer to a page that includes a data structure identifying additional free data
13 pages’ Therefore, the Applicant’s arguments are moot in view of the prior art.

14
15 This argument does not address the technical point that has been raised above. As
16 stated above, Grigorovitch’s pointer points to a location where additional data pages can
17 be found. The role of this kind of pointer is to statically reference another location, not to
18 be moved ahead in the manner claimed. **If this rejection is repeated, the Patent Office**
19 **is asked to explain how a mere pointer to data pages is being interpreted as the act**
20 **of “moving a pointer associated with the cache memory ahead to define free cache**
21 **space.”**

22 For the above-identified reasons, the Applicant submits that the rejection of claim
23 31 is improper, and respectfully requests that it be withdrawn. Independent claim 41
24 recites subject matter that is related to that set forth in claim 31. Therefore, independent
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41 is not disclosed by Grigorovitch for similar reasons to those set forth above for claim 31.

The remainder of the claims rejected under 35 U.S.C. § 102 depend variously from the above-identified independent claims. These claims are not disclosed by Grigorovitch for at least the reason that they incorporate the subject matter of their respective independent claims.

As stated in MPEP § 2131, “A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). As noted above, Grigorovitch fails to disclose all of the elements in the independent claims. Accordingly, Grigorovitch fails to anticipate any of the claims under 35 U.S.C. § 102.

For at least the above-identified reasons, the Applicant respectfully requests the Patent Office to withdraw the 35 U.S.C. § 102 rejection based on Grigorovitch.

Regarding the 35 U.S.C. § 103 Rejections

Claims 2, 15, 32, and 42 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Grigorovitch in view of U.S. Published Application No. 2002/0135585 to Dye et al. (referred to as “Dye” below). Claims 5, 14, 16, 18, 20-22 26, 28, and 38 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Grigorovitch in view of U.S. Published Application No. 2003/0109313 to Gavin (referred to as “Gavin” below) and Japanese patent document No. 2001/203995 to Bae et al. (referred to as “Bae” below). Claims 2, 15, 32, and 42 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Grigorovitch in view of U.S. Published Application No. 2003/0041214

1 to Hirao et al. (referred to as "Hirao" below). Claims 10-12 and 23-25 are rejected under
2 35 U.S.C. § 103(a) as being unpatentable over Grigorovitch in view U.S. Patent No.
3 6,425,057 to Cherkasova et al. (referred to as "Cherkasova" below) and U.S. Published
4 Application No. 2005/0166006 to Talbot et al. (referred to as "Talbot" below). Applicant
5 respectfully traverses each of these rejections for the following reasons.

6 As a first preliminary aside, it is noted that Applicant's first Response
7 inaccurately enumerated the various 35 U.S.C. § 103(a) rejections made in the first Office
8 Action. The present Response rectifies this inadvertent error by correctly listing and
9 responding to the various bases for rejection under 35 U.S.C. § 103(a).

10 As a second preliminary matter, claim 16 has been canceled in the previous
11 Response. Therefore, the Applicant submits that the rejection of this claim in the present
12 application is a moot issue.

13 As to a third preliminary matter, there is no rejection of claims 6, 19, 29, and 39
14 in the body of the Office Action, yet the cover sheet of the Office Action indicates that
15 these claims have been rejected. The Patent Office may have intended to reject these
16 claims based on the combination of Grigorovitch and Hirao. In other words, the Patent
17 Office may have intended to apply Grigorovitch and Hirao to claims 6, 19, 29, and 39,
18 rather than claims 2, 15, 32, and 42. In any event, the Patent Office is requested to clarify
19 the status of claims 6, 19, 29, and 39 in the next correspondence with the Applicant.

20 As to the rejections, the subject matter of the Grigorovitch published application
21 and the present claimed invention were, at the time the invention was made, subject to an
22 obligation of assignment to Microsoft Corporation of Redmond, Washington. This is
23 supported by the assignment documents filed for the Grigorovitch application and the
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1 present application, copies of which were submitted as Exhibit A in the previous
2 Response. Accordingly, pursuant to the provisions of 35 U.S.C. § 103(c) and MPEP
3 § 706.02(I), the Grigorovitch document is not a valid reference against the claimed
4 invention. And since the non-prior art Grigorovitch document is an integral part of each
5 of the Office Action's multiple 35 U.S.C. § 103(a) rejections, the Office Action fails
6 establish a prima facie case of obviousness for any of the 35 U.S.C. § 103(a) rejections.

7 In reply to this argument, the Final Office Action states in paragraph No. 20:
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9 With regard to the 103(a) rejections, the Applicant alleges that Grigorovitch is not
10 prior art due to its lack of an establishment of prima facie case of obviousness, as well as its
11 common assignee with the claimed invention. However, Section 706.02(I) 1 [R-3] of the
12 MPEP states the following: The burden of establish that subject matter is disqualified as prior
13 art is placed on applicant once the examiner has established a prima facie case of obviousness
14 based on the subject matter. For example, the fact that the reference and the application have
15 the same assignee is not, by itself, sufficient evidence to disqualify the prior art under 35
16 U.S.C. 103(c). There must be a statement that the common ownership was 'at the time the
17 invention was made.' Since the fact that Grigorovitch was shown to in fact teach the
18 limitations of the Independent claims above, a prima facie case of obviousness was
19 established. Therefore, the Applicant's arguments are moot in view of the prior art.
20

21 This argument is legally and factually misplaced. First, the first Response
22 submitted proof that the Grigorovitch application and the present invention were
23 commonly owned. Second, the first Response made the necessarily statement required
24 by the MPEP, namely, "The subject matter of the Grigorovitch published application and
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1 the present claimed invention were, **at the time the invention was made**, subject to an
2 obligation of assignment to Microsoft Corporation of Redmond, Washington” (as
3 repeated verbatim herein, with emphasis). **This is all that the rules require in order to**
4 **remove the Grigorovitch document as a reference applied in the various Section 103**
5 **rejections.**

6 For least the above-identified reasons, the Applicant requests that the multiple 35
7 U.S.C. § 103(a) rejections be withdrawn. The non-prior art status of the Grigorovitch
8 application is a matter of stark clarity in favor of Applicant.

9
10 *Conclusion*

11 The arguments presented above are not exhaustive; Applicant reserves the right to
12 present additional arguments to fortify its position. Further, Applicant reserves the right
13 to challenge the alleged prior art status of one or more documents cited in the Office
14 Action.

1 In conclusion, all objections and rejections raised in the Office Action having
2 been addressed, it is respectfully submitted that the present application is in condition for
3 allowance and such allowance is respectfully solicited. The Examiner is urged to contact
4 the undersigned if any issues remain unresolved by this Amendment.

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7 Respectfully Submitted,

8 Dated: 4/4/2007

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